DOCUMENT RESUME

ED 150 396 08 CE 014 681

AUTHOR	Myers, Douglas D.; And Others
TITLE	Case Study Report #25. Social and Self Development: A Followup Study of Career Education Model IV Students.
INSTITUTION	Mountain-Plains Education and Economic Development Program, Inc., Glasgow AFB, Mont.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Aug 75
CONTRACT	NE-C-00-3-0298
NOTE	27p.; For related documents see CE 014 658-681 and ED 110 610
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Attitude Tests; Behavior Rating Scales; *Career Education; Comparative Analysis; Demonstration Programs; *Disadvantaged Groups; Economically Disadvantaged; Educationally Disadvantaged; Family Programs; Federal Programs; Followup Studies; Individualized Programs; Individual Power; Need Gratification; Personality Tests; Program Effectiveness; *Residential Programs; Self Actualization; *Self Concept; Self Concept Tests; *Social Development; Socioeconomic Status; *Student Development
IDENTIFIERS	Idaho; Montana; Mountain Plains Program; Nebraska; North Dakota; South Dakota; Wyoming

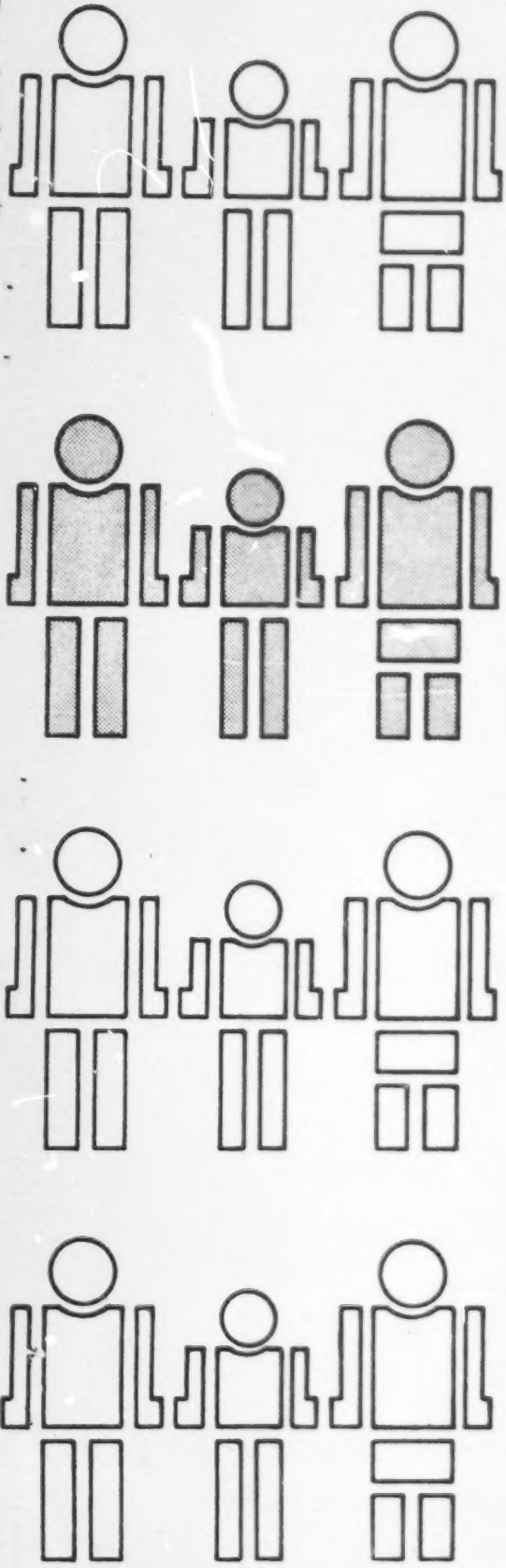
ABSTRACT

A follow-up study was conducted to assess the various dimensions of social and self-perception of former participants in the Mountain-Plains program, a residential, family-based education program developed to improve the economic potential and lifestyle of selected student families in a six-state area. Twenty-three student families were randomly selected and interviewed at an average of ten months postexit. Nonequivalent control group designs were used to compare independent samples of entering students to the sample of departed students. The following instruments were used for the analysis: the Tennessee Self-Concept Scale, Srole's Anomie Scale, Neal and Seeman's Powerlessness Scale, the Self-Anchoring Scale of Life Satisfaction, and a socioeconomic status score. Two reference groups were used to compare results. Significant results were found in only the following three of the five areas of measurement: self-concept, life success ratings, and socioeconomic status. Correlation analyses for heads of households and spouses were also reported. (An earlier report, ED 110 610, examines the work and income variables for the group and a series of twenty-three case studies reports specific findings on individual student families, CE 014 658 to 014 680.) (BM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

MAR 22 1976

ED150396



CASE STUDY REPORT #25

SOCIAL AND SELF DEVELOPMENT:

A Followup Study of Career Education Model IV Students.

U.S. DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

CE 014 681

AP 147

MOUNTAIN PLAINS EDUCATION ECONOMIC DEVELOPMENT PROGRAM INC.

SOCIAL AND SELF DEVELOPMENT: A FOLLOW-UP STUDY OF CAREER EDUCATION MODEL IV STUDENTS

Authors:

Douglas D. Myers
Rowan W. Conrad
David A. Coyle

A Product of Research Services Division

David A. Coyle, Director

August, 1975

This is the last in a series of reports from case studies, conducted December, 1974 - January, 1975.

Series Edited by Michael C. Fenenbock

The work presented in this publication was performed pursuant to Contract NE-C-00-3-0298. The opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by that agency should be inferred.

TABLE OF CONTENTS

LIST OF TABLES iii

INTRODUCTION 1

METHODOLOGY 2
- Subjects 2
- Instruments 2
- Design 4
- Procedures 5

RESULTS 5
- Self-Concept 5
- Powerlessness 5
- Anomie 6
- Life Success Ratings 6
- Socio-Economic Status 6
- Correlation Analysis for Heads-of-Household 7
- Correlation Analysis for Spouses 7

DISCUSSION 13
- Summary 13
- Power and Integration 13
- Success Ratings 14
- Self-Concept and Income 15
- Self-Concept and Anomie 16
- Anomie and Powerlessness 17
- Socio-Economic Status 17
- Stable Social Perceptions 17

IMPLICATIONS FOR PROGRAM DEVELOPMENT 18

REFERENCES CITED 21

LIST OF TABLES

Table		
1	Self-Concept	8
2	Powerlessness	9
3	Anomie	9
4	Success Ratings	10
5	Socio-Economic Status for Heads-of-Household	11
6	Correlations Among Study Variables for Currently and Recently Employed Heads-of-Household	11
7	Correlations Among Study Variables for Spouses	12

SOCIAL AND SELF-DEVELOPMENT: A FOLLOW-UP STUDY OF CAREER EDUCATION MODEL IV STUDENTS

INTRODUCTION

In the recent past, efforts to impact the nation's disadvantaged population have centered largely on cognitive education and job training. This approach presupposed certain elements of social and self-development, most importantly, that deficient social integration, low self-concept, and generally poor interpersonal functioning--all known correlates of disadvantaged status--were the effect of, rather than the cause of, employment dislocation. The general failure of programs aimed at the disadvantaged has helped undermine this assumption of causality.[1]

Recent research has centered on the personal/interpersonal nature of many problems facing the disadvantaged. Fitts and Associates (1969-1972) in their monograph series have highlighted the relationship between self-concept and disadvantaged status as have Miskimins and Baker (1973). Tiffany, Cowan, and Schontz (1967) have pointed to self-concept as a distinguishing variable for rehabilitation clients who subsequently were able to maintain employment. In terms of proactive psychological functioning, Conrad and McMahon (1974) found a disadvantaged population to more closely resemble hospitalized psychiatric patients than normal adults. Finally, Conrad (1975) has interpreted personality traits observed in a disadvantaged population in terms of "arrested"

---

[1] For a fuller discussion of employment and disadvantaged status, see R.W. Conrad, D.D. Myers and D.A. Coyle, Work and Income: A Follow-Up Study of Career Education Model IV Students, (Glasgow, MT: Mountain-Plains Press, April, 1975).

personality development using Erickson's model. In this fashion, we find both popular experience with programming for the disadvantaged, as well as research evidence, leading away from an exclusive focus on cognitive education and vocational skill variables to a new emphasis on self-concept and proactive psychological/interpersonal/social functioning.

As a consequence, self-perception, interpersonal skills, and social integration have become important elements of focus in Mountain-Plains' attempt to impact a disadvantaged population. This report assesses various dimensions of social and self-perception of former Mountain-Plains students.

METHODOLOGY

Subjects. Subjects are a random sample of former Mountain-Plains student families (n = 23) stratified by exit period, completion status, and area of enrollment, interviewed at an average of ten months post exit.

Instruments. A review of social and self-perception instruments--in terms of their direct relationship to program objectives in social and self-development led to the use of the following:

1. Fitts (1965) Tennessee Self-Concept Scale (TSCS) was designed as a comprehensive measure of the dimensions of self-concept. A total score is derived from 90 items which also are categorized into eight sub-dimensions of self-concept; identity, self-acceptance, behavior, physical self, moral/ethical self, personal self, family self, and social self. Fitts reports reliabilities for most subscales "falling in the 0.80 to 0.90 range" with the reliability of the total score at 0.88. Validity has been established in

numerous studies; including a factor analysis by Vacchiano and Strauss (1968) which approximates the conceptually developed scales.

2. Srole's Anomie Scale (Srole, 1956) is a measure of "self-to-others" alienation and records feelings of social disintegration or "not belonging" to the society in which one is immersed. Items are scored dichotomously (agree-disagree) with "one" assigned to the "disintegrated" response and and "zero" to the "integrated" response.

   As elaborated by Srole, those with high anomie scores do not feel a part of either the immediate society around them or the larger society. They feel, "alone, cut off, unwanted, unloved, unvalued." Their social disintegration (high anomie) is likely to be characterized by confusion about life goal choices, means of pursuing life goals, and evaluation of success and failure. They may see community leadership as detached and indifferent, the social order as fickle and unpredictable, life goals already attained as retrogressing and threatened, experience an absence or loss of internalized social norms and values, and hold a perception of the immediate interpersonal environment that is unpredictable and unsupportive. The reproduceability coefficient is reported at 0.90. Validity evidence includes a negative correlation between anomie and socio-economic status.

3. Neal and Seeman's (1964) Powerlessness Scale measures the perceived ability of an individual to influence events in the world around him. The scale is composed of dichotomous statements with respondents chosing one of the pair. A score of zero (powerful) is awarded to "power" choices and

a score of one to "powerless" choices. The reproduceability coefficent of the scale is given as 0.87 and the authors offer various validity evidence to support the scale.

4. The Self-Anchoring Scale of Life Satisfaction--often called the "Ladder of Success"--indicates how one perceives one's life in reference to a ten point satisfaction scale. This locally developed scale closely parallels one devised by Cantrel (1965). Face validity alone is offered for this scale, and its reproduceability has not been established.

5. A Socio-Economic Status (SES) Score was derived from the U.S. Census Bureau's scale as reported in Miller (1964). A reproduceability of 0.96 over a ten year period is reported.

Design. Non-equivalent control group designs are used to compare independent samples of entering students to the sample of departed students, with differences assessed using the t-test for independent samples with the probability of a type I error reported for each analysis. Criterion variables for these analyses are: (1) the self-concept and its various aspects, (2) Anomie, (3) Powerlessness, and (4) life success rating.

Two reference groups are used to compare results. The reference subjects for self-concept comparison are those studied by Mayotte and Conrad (1974). Subjects in that study were shown to be representative of all entering Mountain-Plains students on self-concept and related variables. A second group of reference subjects used for the analysis of Powerlessness, Anomie, and Success, and family members entering Mountain-Plains during the Spring of 1975.

These families are drawn from a random sample of two families per week during that period. On psychological test data (Personal Orientation Inventory) these subjects were found to be more proactively psychologically functional than the average entering student. Thus, as with the earlier study,[2] a built-in bias in the direction of a type II error accrues from the nature of the reference group.

A pretest/post test one group design examines SES scores of currently or recently employed heads-of-household using the t-test for related samples to assess the score difference.

Correlation matrices for heads-of-households and spouses are presented to examine the interrelationship of income, and the various social/psychological measures employed in the study.

Procedures. Procedures are elaborated in the first report in this series.[3]

RESULTS

Self-Concept. Mean differences were in a favorable direction on all TSCS scales in the comparison of post-program students to a representative sample of entering students. Score differences on total self-concept, identity, self-satisfaction, personal self, and family self may all be interpreted with at least 90% confidence; whereas score differences on moral ethical self and physical self are interpretable with less than 75% confidence. (See Table 1 and Figure 1.)

Powerlessness. Score differences between entering and exited students are small and cannot be interpreted with sufficient confidence to be credited as

---

[2] Ibid.

[3] Ibid.

true differences. Women are seen to feel more powerless than men in both the entering and exited groups; although the confidence of interpretation of the difference in the exited group--71%--is marginal. (See Table 2.)

Anomie. Score differences between entering and departed students are small, as are the differences between the male and female scores in each group, and cannot be interpreted with sufficient confidence to be credited as true differences.

Life Success Ratings. At entry, males rate their past success less favorably than do females. This difference in rating of past success between sexes does not obtain for the post Mountain-Plains group. Exited males see their past more favorably than entering males. Exited males also view themselves as currently more successful than those rating current success at entry; although females are not seen to perceive such enhanced current success. Neither entering nor exited students recorded differences by sex in future success ratings; although exited students of each sex now see their future more positively than those entering. Confidence of interpretation for differences reported for success ratings range from 70% to 99% and are reported with the success data. (See Table 4.)

Socio-Economic Status. Heads-of-household[4] are found to have been employed on jobs with a higher SES score ratings after completing Mountain-Plains than at entry. (See Table 5.)

---

[4] Head-of-household is a designation chosen by the family for one spouse of two parent families at entry into Mountain-Plains for legal and administrative reasons. With very few exceptions (1% or less) this title accrues to the male.

Correlation Analysis for Heads-of-Household. The measures used in the study are seen to be largely independent with the exception of powerlessness and anomie which have 38% common variance, and current success and anomie with 21% common variance. Among the measures, only self-concept correlates significantly with income--the variables showing 27% mutual variance.

Correlation Analysis for Spouses. For spouses, anomie and powerlessness are again seen to be related measures with 55% common variance. Additionally, powerlessness and self-concept are related measures for spouses with 28% common variance. None of the measures correlated significantly ($p \leq 0.05$) with income.

Table 1

SELF-CONCEPT

Scale	Sample at Entry* Into Counseling		Sample at Average 10 Month Post-Program		t	p
	Mean	SD	Mean	SD		
Self-Criticism (SC)	33.0	6.48	33.0	5.91	.44	>.25
Total Positive Score (P)	322.4	47.98	337.55	24.06	1.55	.06
Identity (R1)	116.6	17.29	121.9	8.79	1.50	.07
Self-Satisfaction (R2)	99.6	18.64	105.25	9.53	1.48	.07
Behavior (R3)	106.2	16.59	110.15	10.46	1.05	.15
Physical Self (CA)	65.4	9.42	66.57	7.50	.48	>.25
Moral-Ethical Self (CB)	67.0	9.52	68.53	6.98	.65	>.25
Personal Self (CC)	62.6	10.23	65.28	5.14	1.30	.10
Family Self (CD)	63.6	13.01	70.85	8.34	2.44	.009
Social Self (CE)	63.8	9.84	66.00	6.64	.95	.17

* From Mayotte and Conrad (1974).

Table 2

POWERLESSNESS

	Entering			Departed			
	Mean	SD	t Sex	Mean	SD	t Sex	t, entering vs. departed
Male	2.20	1.32	1.73 (p=.06)	2.47	1.50	1.01 (p=.29)	0.54 (p>.30)
Female	3.15	1.57		3.05	1.87		0.17 (p>.30)

Table 3

ANOMIE

	Entering			Departed			
	Mean	SD	t Sex	Mean	SD	t Sex	t, entering vs. departed
Males (n=15)	2.13	1.25	0.45	2.30	1.26	0.61	0.40
Females (n=20)	2.35	1.56		2.57	1.57		0.45

Table 4

SUCCESS RATINGS

		Entering				Departed					
Time	Sex	Mean	SD	t Sex	p	Mean	SD	t Sex	p	t Groups	p
Past	Male	1.00	1.13	3.06	>.01	2.56	1.95	0.77	.50	2.87	>.05
	Female	2.35	1.53			3.10	2.02			1.30	.20
Present	Male	3.07	1.62	1.04	.30	4.56	1.72	0.97	.40	2.56	>.01
	Female	3.60	1.53			3.86	2.30			0.41	—
Future	Male	6.93	1.39	0.04	—	7.56	2.01	0.44	—	1.06	.15
	Female	6.95	1.79			7.30	1.34			0.68	.25

Table 5

SOCIO-ECONOMIC STATUS FOR
HEADS-OF-HOUSEHOLD

	Mean	SD	t
Pre-Mountain-Plains	34.0	20.0	2.41*
At Follow-Up	49.7	24.9	

* Statistically significant, $p \leq 0.05$.

Table 6

CORRELATIONS AMONG STUDY VARIABLES FOR CURRENTLY
AND RECENTLY EMPLOYED HEADS-OF-HOUSEHOLD

	Income	Self-Concept	Power-lessness	Anomie	Success	SES
Head-of-Household Income	1	.52*	.20	17	-.13	.08
Self-Concept (P Score)	.52*	1	.05	-.18	.03	.05
Powerlessness	.20	.05	1	.62*	-.28	.01
Anomie	.17	-.18	.62*	1	-.46*	-.20
Current Success	-.13	.03	-.28	-.46*	1	-.07
SES Score	.08	.05	.01	-.20	-.07	1

* Significant Correlation, $p \leq 0.05$.

Table 7

CORRELATIONS AMONG STUDY VARIABLES
FOR SPOUSES

	Family Income	Self-Concept	Power	Anomie	Success
Family Income	1	.39	-.28	-.38	-.21
Self-Concept	.39	1	-.53*	-.39	.26
Powerlessness	-.28	-.53*	1	.74*	-.28
Anomie	-.38	-.39	.74*	1	-.10
Success	-.21	-.26	-.28	-.10	1

* Significant correlation, $p \leq 0.05$.

DISCUSSION

SUMMARY

The initial study in this series (Conrad et.al., 1975) reported that departed Mountain-Plains students rate themselves as more satisfied with their work and are seen as more satisfactory employees by employers than a comparison sample of entering students. In addition, income was seen to have increased significantly over pre-Mountain-Plains earnings.

The current study reveals that: (1) male students now perceive themselves as subjectively more successful than a group of entering males, (2) self-concept, particularly family self-concept, is higher for exited students than for a representative group of enterers, and (3) current employment has a higher socio-economic status than those positions held before entering Mountain-Plains. However, Mountain-Plains is not shown to have impacted social integration (anomie) or powerlessness. This lack of impact, especially in view of program impact on other variables, bears examination.

Power and Integration. Several possible contributing factors emerge as possible explanation for a failure to impact social integration and powerlessness. First, and most obvious, is the fact that the reference group is known to be biased in the direction of a Type II error. Departed students may well have scored considerably lower on measures employed at entry than the reference group. Pretests, however, were not available for related samples analysis. Second, it is possible that entering students are naive and often perceive themselves as having more social power and options than actually exist--this could

be enhanced by the fact that just prior to testing they have experienced a "social success" in terms of being accepted to Mountain-Plains. Both interpretations draw support from the fact that Mountain-Plains students, both at entry and after departure, score at the literature norms rather than less favorably as one would expect a disadvantaged population to do. Third, the problem may lie in the gross nature of measures employed. Rather than assessing specific aspects of social power and integration, the two scales used are general, overall measures of broad concepts. It seems likely that some perceptual change is occurring. That change, however, may not be ascertainable with such poor instrument resolution.[5] Finally, it is possible that Mountain-Plains does not impact perceptions of social power and integration; although gains known to accrue on related social and psychological variables make a "no gain" outcome seem highly unlikely.

Success Ratings. The fact that exited students rate their past more favorably than entering students is consistent with interviewer observations. Although instructed to rate a particular point in the past, subjects usually responded in terms that showed they were rating their "average" past--a past which for exited students includes positive program and post program experiences.

In a similar view, more positive past and present ratings were recorded by entering females (versus entering males). This result appears to derive

---

[5] Srole reduced seven aspects of anomie to five and used one item per aspect in his scale. Examining each item by sex, exited females see community leaders as more concerned than do enterers, and exited males see the social order as less capricious ($p \leq 0.10$).

from the fact that marriage is valued by and is a major success criteria for female subjects. The basic economic failure of the family is viewed by both spouses as accruing mainly to the male. Consequently, as females have achieved "marriage," (a major "success" criteria for females) they tend to have a more positive view of past success, whereas males experience past and current vocational failures (a major "success" criteria for males) more directly. The fact that exited students tend to view their future success more positively than entering students is an encouraging finding indicating that Mountain-Plains may be providing students that essential but often amorphous quality "hope," although it should be noted that the interpretation of confidence for this measure (85% for males and 75% for females) is relatively low.

Self-Concept and Income. The relationship among variables is of interest--particularly the fact that 27% of the variance in head-of-household salary can be accounted for by self-concept.[6] The key role of self-concept has traditionally been assumed by Mountain-Plains; however, this is the first solid data indicating a predictor effect. The correlation does not show cause and effect--increased income could just as well be attributed as the cause of increased self-concept if interpreted from this data alone. However, as documented in various studies (e.g. Schwager and Conrad, 1974; Mayotte and Conrad, 1974),

---

[6] The correlation is essentially the same for income and self-concept using family income (0.48 vs. 0.52).

gains on self-concept and related variables accrue to students during counseling treatment at Mountain-Plains.[7] Consequently, it is safe to say that the self-concept increase precedes the income gain. In fact, self-concept improvement is seen to follow the classic treatment pattern whereby gains are made in treatment only to regress following treatment--but not to pretreatment levels (see Figure 1).

One gain, family self-concept, does not regress (see Table 1 and Figure 1). This cannot be predicted from general knowledge of treatment gains (which predict regression). However, in view of the program's family emphasis and the fact that the family is the single Mountain-Plains reinforcer that departs the program with the student, the strong showing for family self-concept is a logical development.

Self-Concept and Anomie. The strong correlation of powerlessness and self-concept among spouses is of interest--especially as it does not appear to hold for heads-of-household. For a group of "breadwinners" self-concept and income are strongly related. For a group where only a few members are employed, self-concept and general feelings of environmental support seem to be important mutual influences. This is consistent with Hoyt's (1973) factor study which found "being overwhelmed" to be a major factor among problems reported by

---

[7] Pre-Post program income for exited heads-of-household correlates at $r = 0.54$; however, post-Mountain-Plains self-concept and precenter income correlate at $r = 0.11$. Thus, pre-Mountain-Plains income is seen as a predictor of post-Mountain-Plains income and post-Mountain-Plains self-concept as a post-center income predictor whereas the follow-up self-concept cannot predict pre-center income. This indicates pre-center income and post-center self-concept to be independent predictors.

spouses as well as with Pollack's (1975) similar finding in a more recent analysis of data from the same instrument.

Anomie and Powerlessness. Anomie and powerlessness are seen to be strongly related in the current population for both heads-of-household and spouses; indicating similarity of the dimension measured by the anomie and powerlessness scales in the population under study. The general relationship of powerlessness and anomie is an open question and the literature is contradictory on this point. For example, Neal and Rettig (1963) reported powerlessness and anomie to be independent; although in an earlier report Neal (1959) found a significant correlation ($r = 0.32$). Such contradictions in the discussion of the concepts may be population centered with powerlessness being a correlate of general anomie in some groups but not in others. (Srole's five dimensional definition of anomie includes powerlessness as an aspect of anomie. Apparently this aspect is strong in the current population.)

Socio-Economic Status. The failure of the SES scores to correlate with anomie is not consistent with previous research (Srole, 1956; Rose, 1962; Angell, 1962). While the previous finding may be accurate for other populations, socio-economic status is seen to be independent of the personal and social perceptions of Mountain-Plains students.

Stable Social Perceptions. While exited Mountain-Plains students are seen to have made both socio-economic and self-concept gains, their perceptions of the world in which they live and work seem to be relatively stable. (In comparison of the Mountain-Plains student population to other populations

reported in the literature, the Mountain-Plains student population appears to feel similarly "integrated" and "powerful".) This is anomalous as the interviews (see Case Studies 2-24) indicated generally strong gains in social and interpersonal skills. Perhaps, as May (1969) states, it is not the condition (impressed by society on us all) that is the crucial variable, but rather the skill with which one copes with it.

IMPLICATIONS FOR PROGRAM DEVELOPMENT

There is, as many have claimed, a fixed component in post-program success. This fixed component has been variously defined but generally can be referred to as the subject's socio-economic past. In other words, so the argument goes, personal/family history--as measured in terms of socio-economic variables--is an influence on post program success which cannot be totally altered by program participation. While important, this past socio-economic history appears to be less fixed than first suspected. For instance, the current study confirms that self-perception is both alterable and related to post program success. Additionally, the self-perception gains recorded in this study appear to be unrelated to the subject's past socio-economic history. The implication drawn is that, while post program success is influenced by the subject's pre-program socio-economic history, Mountain-Plains impacts self-perception, and this self-perception impact is reflected in post-program success.

The fact that subjectively perceived success does not correlate significantly with either income or socio-economic status indicates that the study population are not considering these traditional "success" indicators in establishing ratings. During the interviews with the families, the answer to the question,

"What in your life the way it is now, gives you satisfaction?", supports this conclusion. Subjects usually answered "health," and/or "children," and/or "spouse," and/or "job." The amount of money earned on the job was either not mentioned, or mentioned secondarily. There were no answers given in terms of the "respectability" (status) of the job. In other words, the fact of employment seemed to be important as did the satisfaction with the employment but neither income beyond sustenance nor job status were seen as particularly important. The implication of this finding is largely for placement--the amount of money earned by the student and the status of the job are not seen to be as important as whether a job is obtained and whether that job is intrinsically fulfilling. Salary need only be adequate, it need not be spectacular or impressive.[8] (This is also consistent with subjective reports of state office placement staff who reveal that once the student knows there are job options, the deciding factor--which one to take--is invariably the level of satisfaction expected on the job rather than which job offers the highest salary.)

The apparent stability of social perceptions may indicate that social realities in a modern age--an age often termed "the age of alienation"--are more powerful and pervasive than any programmatic effort. Thus, program efforts might best be directed towards developing student skills to cope with alienation and powerlessness rather than an attempt to impact perceptions which, in fact, may be quite accurate.

---

[8]This is consistent with Maslow's heirarchy of needs which would predict that once income insured food and shelter, other more esoteric concerns would be the focus.

Finally, in the development of programs, it is recommended that the self-perception variable be given attention in overall program design, and addressed directly in treatment. Mountain-Plains studies reveal that through such an approach, self-perception can be impacted. This variable along with pre-center income, are both similarly useful (r^2 = .27 and r^2 = .29 respectively) as tools in predicting post-center income.

REFERENCES CITED

Angell, R. "Preferences for Moral Norms in 3 Problem Areas," American Journal of Sociology, 1962, 67, pp. 650-672.

Cantrel, H. The Pattern of Human Concerns. New Brunswick, NJ: Rutgers University Press, 1965.

Conrad, R.W. A Personality Development Interpretation of Employability and Disadvantaged Status With Remedial Implications (Counseling Services Report No. 21). Glasgow, MT: Mountain-Plains Press, December, 1974.

Conrad, R.W. and McMahon, S.L. Self-Actualization in a Rural Disadvantaged Population: Level of Development and Program Utility (Counseling Services Report No. 12). Glasgow, MT: Mountain-Plains Press, March, 1974.

Conrad, R.W., Myers, D.D., and Coyle, D.A. Work and Income: A Follow-Up Study of Career Education Model IV Students. Glasgow, MT: Mountain-Plains Press, April, 1975.

Fitts, W.H. Manual for the Tennessee Self-Concept Scale. Nashville, TN: Counselor Recordings and Tests, 1965.

Fitts, W.H. and Associates. Studies on the Self-Concept and Rehabilitation, Seven Volumes. Nashville, TN: Counselor Recordings and Tests, 1969-1972.

Hoyt, D.P. Analysis of Student Inventory (Counseling Services Report No. 7). Glasgow, MT: Mountain-Plains Press, July, 1973.

May, R. Power and Innocence. New York: W.W. Norton, Co., 1972.

Miller, D. Handbook of Research Design and Social Measurement. New York: David McKay, 1964.

Miskimins, R.W. and Baker, B.R. Self-Concept and the Disadvantaged. Monograph Supplement No. 41. Brandon, VT: Clinical Psychology Publishing Co., 1973.

Neal, A.G. "Stratification Concomitants of Powerlessness and Normlessness." Unpublished Ph.D. dissertation, Ohio State University, 1959.

Neal, A.G. and Rettig, S. "Dimensions of Alienation Among Manual and Non-Manual Workers," American Sociological Review, 1963, 28, pp. 599-608.

Neal, A.G. and Seeman, M. "Organizations and Powerlessness: A Test of the Median Hypothesis," American Sociological Review, 1964, 29, pp. 216-226.

Pollack, R.M. Reliability Assessment of the Participant Inventory (Electronic Data Processing Report No. 15). Glasgow, MT: Mountain-Plains Press, July, 1975.

Rose, A. "Alienation and Participation," American Sociological Review, 1962, 27, pp. 834-838.

Schwager, H. and Conrad, R.W. Impact of Group Counseling on Self and Other Acceptance and Persistance With Rural Disadvantaged Student Families (Counseling Services Report No. 15). Glasgow, MT: Mountain-Plains Press, June, 1974.

Srole, L. "Social Integration and Certain Corollaries: An Exploratory Study," American Sociological Review, 1956, 21, pp. 709-716.

Tiffany, D.W., Cowan, J.R. and Schontz, F.C. Work Inhibition and Rehabilitation, Parts II and III. Kansas City, MO: Institute for Community Studies, 1969.

Vacchiano, R.B. and Strauss, P.S. "The Construct Validity of the Tennessee Self-Concept Scale," Journal of Clinical Psychology, 1968, 24, pp. 323-326.